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学位論文の題名	<p>Improved Clonality Detection in Hodgkin Lymphoma Using a Semi-nested Modification of the BIOMED-2 PCR Assay for IGH and IGK Rearrangements: A Paraffin-embedded Tissue Study (ホジキンリンパ腫における単クローン性の検出：semi-nested BIOMED-2 multiplex PCR 法の有用性)</p> <p>Pathol Int. 2018;68:287-293</p>
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Improved clonality detection in Hodgkin lymphoma using a semi-nested modification of the BIOMED-2 PCR assay for *IGH* and *IGK* rearrangements: A paraffin-embedded tissue study

[Background] The BIOMED-2 PCR protocols targeting *IGH* and *IGK* genes may be useful for detecting clonality in Hodgkin lymphoma (HL). The clonality detection rates, however, have not been very high with these methods using paraffin-embedded tumor sections. We previously described the usefulness of the semi-nested BIOMED-2 *IGH* assay in B-cell malignancies. In this study, we devised a novel semi-nested BIOMED-2 *IGK* assay. [Methods] Employing 58 cases of classical HL, we carried out the standard BIOMED-2, BIOMED-2 followed by BIOMED-2 re-amplification, and BIOMED-2 followed by semi-nested BIOMED-2, all targeting *IGH* and *IGK*, using paraffin-embedded tissues. [Results] In both *IGH* and *IGK* assays, semi-nested assays yielded significantly higher clonality detection rates than the standard assays and re-amplification assays. Clonality was detected in 13/58 (22.4%) classical HL cases using the standard *IGH/IGK* assays while it was detected in 38/58 (65.5%) cases using semi-nested *IGH/IGK* assays. The detection rates were not associated with the HL subtypes, CD30-positive cell density, CD20-positive cell density, or Epstein–Barr virus (EBV) positivity. [Conclusion] Tumor clonality was detected in nearly two thirds of classical HL cases using semi-nested BIOMED-2 *IGH/IGK* assays using paraffin tumor sections. These semi-nested assays may be useful when the standard *IGH/IGK* assays fail to detect clonality in histopathologically suspected HLs.